INTERNATIONALSEARCHREPORT

International application No. PCT/JP2004/016781

\mathbf{A}_{\cdot}	CLASSIFICATION OF SUBJECT MATTER
Int.Cl	G09F9/30,H05B33/10,H05B33/

14,H01L29/786,H01L21/288,H01L21/3205

According to International Patent Classification (IPC) or to both national classification and IPC

FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

G09F9/30,H05B33/10-33/28,H01L29/786,H01L21/288,H01L21/3205.

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Japanese Utility Model Gazette 1922-1996, Japanese Publication of Unexamined Utility Model Applications 1971-2005, Japanese Registered Utility Model Gazette 1994-2005, Japanese Gazentaining the Utility Model 1996-2005 Japanese Gazette

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X Y	JP 7-312290 A (NEC CORPORATION) 1995.11.28 paragraph [0037]-[0047] , figs. 2-4 & US 5747930 A1 & EP 684753 A1	1,3 2,4-24
¥	JP 7-333652 A (HITACHI, LTD.) 1995.12.22 whole document (family:none)	2,4-24
¥	JP 2003-058077 A (FUJI PHOTO FILM CO., LTD.) 2003.02.28 whole document (family:none)	5-24
Y	JP 2001-196590 A (SEMICONDUCTOR ENERGY LABORATORY CO., LTD.) 2001.07.19 whole document (family:none)	12-15

			<u>-</u>			
X Y	JP 7-312290 A (NEC CORPORATION) 1995.11.28 paragraph [0037]-[0047] , figs. 2-4 & US 5747930 A1 & EP 684753 A1			1,3 2,4-24		
Y	JP 7-333652 A (HITACHI, LTD.) 1995.12.22 whole document (family:none)			2,4-24		
Y .	JP 2003-058077 A (FUJI PHO 2003.02.28 whole document (family:none)	5-24				
Y	JP 2001-196590 A (SEMICONDI LABORATORY CO., LTD.) 2001 whole document (family:none)		12-15			
Further documents are listed in the continuation of Box C. See patent family annex.						
* Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention						
nations	application or patent but published on or after the inter- d filing date ent which may throw doubts on priority claim(s) or which	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone				
is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means		be considered to involve an inventive combined with one or more othe combination being obvious to a pers	er such docur	nents, such		
"P" docum than th	ent published prior to the international filing date but later e priority date claimed	"&" document member of the same pate	nt family			
Date of the actual completion of the international search		Date of mailing of the international search report				
07.02.2005		. 01.	3. 20	05		
Name and mailing address of the ISA/JP		Authorized officer	2M	9804		
Japan Patent Office		Hajime Kitagawa	<u></u>			
3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan		Telephone No. +81-3-3581-1101 E	xt. 3274			
Form PCT/IS	A/210 (second sheet) (January 2004)		-			